Postel

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Telnet Terminal Speed Option

Status of This Memo

This RFC specifies a standard for the Internet community. Hosts on the Internet that exchange terminal speed information within the Telnet protocol are expected to adopt and implement this standard. Distribution of this memo is unlimited.

This standard is modelled on RFC 930 [1], the telnet terminal type option. Much of the text of this document is copied from that RFC.

Motivation

Most operating systems have provisions to keep track of the speed (bit rate) of directly attached terminals and modems. This information is used to control various timing-dependent display processes, e.g., the number of padding characters used for delay. Some software also has user interfaces that are tuned differently for fast and slow terminals. The purpose of this option is to provide similar information for telnet connections.

1. Command Name and Code

TERMINAL-SPEED

Code = 32

2. Command Meanings

IAC WILL TERMINAL-SPEED

Sender is willing to send terminal speed information in a subsequent sub-negotiation.

IAC WON'T TERMINAL-SPEED

Sender refuses to send terminal speed information.

IAC DO TERMINAL-SPEED

Sender is willing to receive terminal speed information in a subsequent sub-negotiation.

IAC DON'T TERMINAL-SPEED

Sender refuses to accept terminal speed information.

IAC SB TERMINAL-SPEED SEND IAC SE

Sender requests receiver to transmit his (the receiver's) terminal speed. The code for SEND is 1. (See below.)

IAC SB TERMINAL-SPEED IS ... IAC SE

Sender is stating his terminal speed. The code for IS is 0. (See below.)

3. Default

WON'T TERMINAL-SPEED

Terminal speed information will not be exchanged.

DON'T TERMINAL-SPEED

Terminal speed information will not be exchanged.

4. Description of the Option

WILL and DO are used only to obtain and grant permission for future discussion. The actual exchange of status information occurs within option subcommands (IAC SB TERMINAL-SPEED...).

Once the two hosts have exchanged a WILL and a DO, the sender of the DO TERMINAL-SPEED is free to request speed information. Only the sender of the DO may send requests (IAC SB TERMINAL-SPEED SEND IAC SE) and only the sender of the WILL may transmit actual speed information (within an IAC SB TERMINAL-SPEED IS ... IAC SE command). Terminal speed information may not be sent spontaneously, but only in response to a request.

The terminal speed information is an NVT ASCII string. This string contains the decimal representation of the transmit and receive speeds of the terminal, separated by a comma, e.g.,

9600,100

No leading zeros may be included. No extraneous characters such as spaces may be included.

The following is an example of use of the option:

Host1: IAC DO TERMINAL-SPEED

Host2: IAC WILL TERMINAL-SPEED

(Host1 is now free to request status information at any time.)

Host1: IAC SB TERMINAL-SPEED SEND IAC SE

Host2: IAC SB TERMINAL-SPEED IS "1200,1200" IAC SE

(This command is 15 octets.)

5. Implementation Suggestions

Many systems allow only certain discrete terminal speeds. In such cases it is possible that a speed may be received that does not match one of the allowed values. We suggest that you pick the nearest speed that is allowed, rounding in a "safe" direction. Safety will depend upon the use of the speed information. If it is being used for padding, it is best to round up, since too much padding is better than too little.

Reference

[1] Solomon, M., and Wimmers, E., "Telnet Terminal Type Option", RFC 930, January, 1985

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